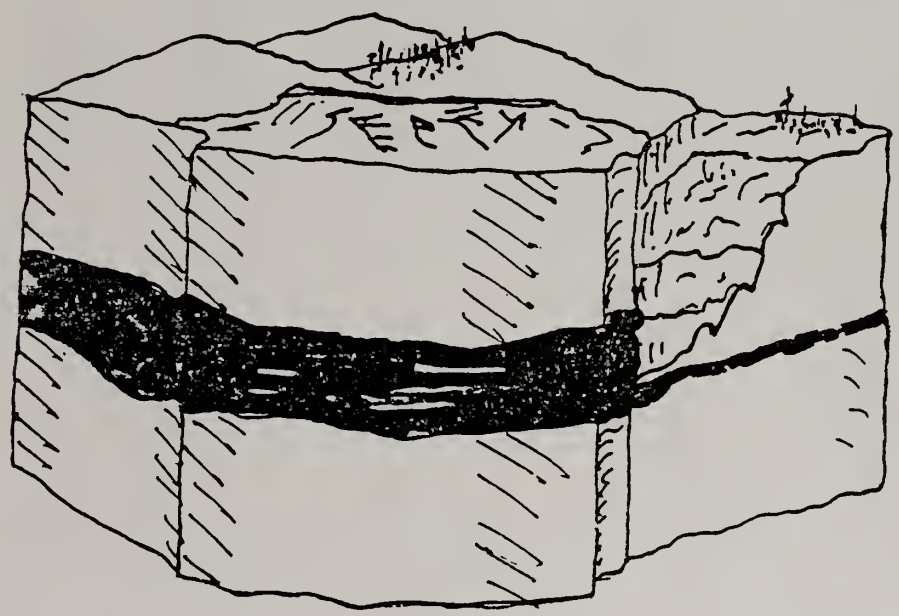
EMRIA

PROGRAM TASK FORCE REPORT



Task Force 7

1979

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INTRODUCTION

The purpose of the Task Force effort was to address:

A. How EMRIA-funded products should contributed to the BLM Planning System and the Secretary's Preferred Alternative.

B. The subject areas and level of detail that should be funded by EMRIA.

C. The relation of EMRIA to other efforts in the Federal coal program.

At the initial Task Force meeting, two sub-groups were formed to address the above subjects. Although initial assignments to the subgroups were different, discussions in both groups identified similar topics for further comment and analysis. Both sub-groups addressed A and B above in some detail; C to a lesser extent. Time did not permit the editing of sub-group products. For the same reason, no effort was made to reconcile philosophical differences. However, differences do not appear to be great. The sub-group reports are included in this product. The Recommendations and Summary were prepared by the Task Force Leader based on group discussions and the sub-group reports.

The Bureau of Land Management is involved in two related planning efforts. One is to develop a multiple-use management scheme for the public lands. A second is an intensive effort to develop and implement a coal management philosophy; leasing coal in selected areas if necessary, to meet national and identified international priorities. The Interior coal effort, of

which the EMRIA program is one part, is engaged in reaching supportable decisions regarding what, when, where, and how in mine.

The following discussion addresses the EMRIA effort related to the collection of basic resource data applicable to the multiple-use planning and decision processes for coal. The analysis assumes the reader is familiar with the BLM Planning System, the Preferred Alternative, and the EMRIA Assessment Task Group #406 report dated June 1978.

RECOMMENDATIONS

The recommendations provided here were formulated by the Task Force Leader from group discussions and the accompanying sub-group reports. Task Force members are in general agreement. However, a consensus on individual issues and recommendations may not be assumed.

A. EMRIA dollars should support activities according to the following priorities.

   1. Vegetation/soil, water and geologic investigations at the Coal Activity Planning step.
   2. Activities required to respond to specific unsuitability criteria directly related to resource investigations in vegetation/soil, water, and geology. Technical development of methodologies and techniques to assist the BLM Planning System respond quickly to Coal Planning needs. Examples include hydrologic modeling and a procedure to quickly identify alluvial valley floors.
   3. Inventory and analysis related to the URA/MFP step of planning.

B. The level of data collected with EMRIA dollars should generally be suitable for mapping and analysis at a scale of 1:24,000 at the Coal Activity Planning step and 1:100,000 at URA/MFP.

C. The EMRIA Staff should assume a direct role in design, managing, and final assembly of "EMRIA Studies". Present cooperators should continue to contribute; however, Bureau of Reclamation should function as a study contributor only. The new procedure could phase in beginning in FY 80.

In FY 80, two work-years additional effort would be required to accomplish this. These could be permanent part-time positions.

An "EMRIA" type effort should be expanded in the future to other on-shore minerals when significant surface disturbance is expected.

D. A permanent and active Department-level clearinghouse should be established to coordinate "in-house" activities and to monitor the effects of others in coal research.

E. The role of the EMRIA Staff at the Denver Service Center is:

1. Technical assistance to States in accomplishing coal program objectives.
2. Interagency coordination.
3. Development of annual and projected program needs in cooperation with coal states.
4. The execution of selected elements of the annual EMRIA program where interagency coordination, interstate coordination, or special technical skills are required.

F. The EMRIA Staff should develop training packages to assist BLM specialists (hydrologists, soil scientists, geologists) translate technical data into understandable recommendations for management regarding land-use decisions, lease ranking, and lease stipulations.

G. Reclaimability, one of the Unsuitability Criteria, will be addressed by BLM planners at the URA/MFP step. EMRIA dollars should support development of:

1. A Reclaimability Assessment for surface coal areas suitable for use at URA/MFP (scale of 1:100,000 or smaller).

2. A "cookbook" guide for assessing reclaimability protential suitable for apllication to specific areas (scale of 1:24,000 or larger).

SUMMARY OF TASK FORCE DISCUSSIONS

The following issues, summarized by the Task Force Leader, were discussed by the Task Force. Some issues identified here are not included in the attached sub-group reports.

1. Program Definition - EMRIA - Objectives and Priorities

   EMRIA should focus on specific issues and defined priorities. The relationship of Coal and EMRIA funds and objectives are outlined below:

DISTRIBUTION OF COAL FUNDING (A)

ES Work by others and BLM-State

Inventory and Analysis At

Preliminary Planning

URA

MFP

CAP

Support program includes inventory and analysis for unsuitability criteria and exceptions.

EMRIA

Analysis of Potential Surface Mine Areas for EMRIA Investment (B)

OBJECTIVES (C)

1. Develop reclamation alternatives.
2. Develop possible leasing stipulations.
3. Develop information and provide analysis for unsuitability criteria and exceptions.
4. Develop information and provide analysis for Track Ranking.

Inventory and Analysis (D)
(Limited to)

1. Soil/Vegetation
2. Hydrology/Climatology
3. Geology/Overburden
4. Other (such as wildlife) if directly related to reclamation objectives.

FUNDING PRIORITIES (E)

1. Investments at Coal Activity Planning phase.
2. Investments at URA/MFP - selected issues related to unsuitability criteria - development of methods and techniques for coal program.
3. Support coal related inventory and analysis and URA/MFP level.*

*Now being funded partially by coal dollars shown at left.

A. Distribution of Coal Funding - The Task Force believes coal funds are divided at the Washington level as follows. A portion goes as pass-through to BLM State Offices and other Federal agencies for direct ES work. A second portion goes to BLM State Offices and field units for "work" and inventory in coal areas. A third portion ($7.9 million - FY 79) is passed to the EMRIA program. The EMRIA program attempts to allocate funds to support various state programs directly related to coal data needs.

B. Defining Potential Surface Mine Areas for EMRIA Investment - To delineate areas suitable for investment of coal funds (EMRIA funds) the Federal estate should be passed through a series of screens. The first should be a map of coal resources; the second, those coal resources which are recoverable by surface mining methods, that is, 200 feet or less of overburden. The third screen should be coal in Federal ownership, plus the inclusion of logical mining units in "checkerboard" areas. This screening can be done now by the EMRIA Staff reviewing available data.

C. No explanation needed.

D. No explanation needed.

E. Funding Priorities - First Priority - activities under the Coal Activity Planning phase of the BLM Planning System - in "Areas Acceptable for Further Consideration". The need for efforts in this phase of the planning will be defined as "site analysis". The site analysis may be a hydrologic investigation, an overburden analysis, or a soils and climate summary. It may only be an analysis of revegetation options, proposed lease stipulations, or unsuitability

criteria, or an analysis of exceptions. The level of detail at this phase of planning will be suitable for a 1:24,000 mapping or overlay exercise. The site analysis at this stage could be similar to the present EMRIA site studies, but will be directed toward specific information and analysis needs. Areas selected will be representative of larger areas (several potential tracts) wherever possible. They will or may fall within preliminary tract identification areas and may include tracts selected for future sales. In some instances, site analysis would continue after tract selection and ES steps. For example, a favorable tract may include an area excluded from mining as buffer to an identified alluvial valley floor. The BLM may wish to analyze the possibility of reducing the buffer to recover valuable coal deposits prior to actual sale.

Second Priority - Investments at URA/MFP to address unsuitability criteria directly related to soil/vegetation, hydrology, geology/ overburden and reclamation.

Efforts would generally require study and analysis by a multi-disciplinary team for resolution; for example, an evaluation of reclaimability requiring soil, water, and geologic interpretations or alluvial valley floor qualifications. It is important to note that the evaluation would generally be at a level suitable for mapping at a scale of 1:100,000. Inventory and field work would generally be minor. The efforts would primarily involve analyzing existing inventory and research products and extrapolating conclusions and projections.

Included in this priority are test efforts relating to technical development and the BLM Planning System. Examples include development of a procedure to quickly identify alluvial valley floors, hydrologic modeling, equipment development, and revegetation efforts. Regarding the latter two, they would generally be of lower priority within the priority two category. Equipment development identified as vital to the surface mine reclamation or planning effort should be specifically identified as needed by a BLM State Director prior to funding. Any revegetation efforts proposed will be specifically identified and presented with an end product and supported with appropriate justification.

Third Priority - Work related to the URA and preliminary planning efforts. The level of accuracy in this stage of planning will be suitable for plotting on maps of a scale of 1:100,000. This scale generally defines the level of accuracy needed for coal planning at this stage of BLM planning. There will be exceptions on accuracy or on a priority for work at this step of the planning effort when supported with appropriate rationale. In this category would fall general water investigations and soil surveys not specifically related to Coal Activity Planning.

2. EMRIA Site Study Reports - Problem - They are not being utilized fully in the land planning process. what problem?

A. Content and Timing - Currently, the Bureau of Reclamation attempts to coordinate interagency input and prepare final reports.

The effort is a low priority for the Bureau of Reclamation when they compare it to other internal activities, especially at the field level. This results in considerable delays by the BR in performing their report coordinating role. Further delays result as other cooperating agencies and entities tend to push BR's requests for study input back in relation to their own program requirements. As a result, reports are usually three to five years in preparation. BR staff have little or no knowledge of the BLM Planning System and how the final report products might be used by public land managers. More importantly, they have limited knowledge of federal and state surface mining regulations. Therefore, the value of the report in presenting and analyzing potential impacts of mining, in relation to BLM management problems, proposing lease stipulations, addressing tract ranking factors, etc., is limited.

B. Use in the Field - Many BLM specialists, especially at the field level have had little training in applying the technical analysis provided in the EMRIA reports to the land management decision process. Specialists are often hired at the District level fresh from the university where they received adequate training in data collection and analysis, but not in the application to multiple-use management decisions. The BLM Planning System, as well as other agency planning systems, have difficulty in applying a specialty analysis to the management decision process. An extensive training program of BLM

specialists would help alleviate this problem. The BLM does provide some training which partly addresses this problem. The BLM should also proceed to work closely with universities in the development of a curriculum that is broadened to include application of technical information to the multiple-use decision process.

C. Volume of Work - The primary method of securing EMRIA "site specific" reports is to contract with the Bureau of Reclamation to originate coordinate, and consolidate input. It is doubtful if the Bureau of Reclamation will be able to increase their present level of work, much less absorb the increased workload anticipated. BR's recent request for an additional 14 positions to handle the workload in FY 79 supports this conclusion. Supplemental contracting to other entities may be required. This has not been particularly successful in the past, and many of the same problems inherent in dealing with BR cited above can be expected. The recommended solution (see D below) is to increase the staffing of the EMRIA Staff at the Service Center and have that unit serve as both report coordinators and authors of the concluding chapters.

D. An Alternative - EMRIA Staff (working closely with state field staff) could coordinate data gathering and timing and content of interagency input. Interagency input could be placed in the report "Appendix" thus avoiding unnecessary editing and retyping for conformity. A reclamation chapter, possible lease stipulations,

options for applying unsuitability criteria and exceptions, and analysis and discussion of the area for elements included in the Ranking Factors should all be assembled and written by the EMRIA Staff in close cooperation with BLM field personnel. This would require a minimum of four additional staff in the EMRIA section (2 in FY 80, 2 in FY 81).

3. Other Agency Efforts - Extensive coordination in the EMRIA program with other agencies has and is taking place. This is recognized as one of the benefits of the program. However, the coal effort with Interior (BLM, GS, F&WS, OSM, etc.) is extremely fragmented. There is a need for a Department level clearing house on coal activities within Interior. The clearing house should sponsor periodic meetings and dissemination of activity reports among Interior agencies. From the standpoint of activities in the Federal government, it is an impossible situation. Extensive work is being done by EPA, DOE, USFS, SCS, and any number of other agencies and quasi public organizations. All these groups are involved in relatively large research and evaluation programs both within their agency and through a wide variety of outside contracting. In some agencies, it would be difficult for them to identify all of their efforts and involvements.

4. Other Mineral Activities - EMRIA analysis should be expanded to other minerals, energy and non-energy, where extensive surface disturbance is anticipated. The kinds of data being generated and analyzed in the EMRIA program as proposed are applicable to most environmental studies of surface disturbed areas. The current emphasis is on coal,

as that is one of the first commodities the BLM has been called to task on. It is probable that BLM will be challenged on other management and planning decision processes in other mineral development areas. The BLM should avoid being in a reactive position to outside criticism before taking action to improve the planning and analysis system. EMRIA analysis, both at the reconnaissance level and at the activity planning stage, should be initiated in other mineral programs.

5. The BLM Planning System - The EMRIA effort should compliment the BLM Planning System. The attached sub-group reports outline several options, another is present here. There should not be rigid procedural requirements as the system must flex to meet a variety of timing and organizational priorities.

Generally, analysis of Unsuitability Criteria relatining to Reclaimability, Alluvial Valley Floors, Flood Plains, and hydrology considerations involving wetlands, would be appropriate for EMRIA funding. Using the guidelines outlined in 1 above, EMRIA input should generally follow on the following outline:

PRE-PLANNING/URA ANALYSIS

Coal planning includes the review of available data and collection of basic data regarding physical and biological resources. Level of accuracy should be "reconnaissance", no greater than 1:100,000 mapping detail. The final analysis should list each Unsuitability Criteria and a brief analysis of data necessary and available to reach unsuitability determinations. The following points are appropriate for noting regarding the pre-planning/URA stage.

A. Much information on Unsuitability Criteria, as well as general planning analysis, is now available. Little coal or EMRIA funds should be required at this stage for general inventory. An exception would be for reconnaissance level data to assist in identifying areas for site-specific investigations.

B. BLM field specialists, that is, hydrologists, geologists, soil scientists, etc., may not be professionally qualified to use existing data (see recommendation on training). Therefore, the approach often taken is to call for more inventory rather than make professional judgments on limited information. This tendency is not unique to BLM.

C. In reviewing Unsuitability Criteria with reconnaissance level data, conclusions should be made regarding the applicability of the criteria, possible exceptions, and the need for more data to adequately address Unsuitability Criteria in the CAP phase. The cost of the above analysis could be funded by coal or EMRIA funding if the effort meets the guidelines in 1 above, (possibly a

lower priority for EMRIA than efforts at CAP step). The analysis could be made by BLM resource specialists in the field and would generally be at a reconnaissance level of accuracy.

COAL ACTIVITY PLANNING

The objectives of EMRIA at this stage are:

1. To develop information and provide analyses for "Tract Ranking".
2. To develop reclamation recommendations and alternatives.
3. To develop potential lease stipulations.
4. To develop information and provide for analyses of unsuitability criteria and exceptions that have been identified in the URA/MFP planning stage for further study and that meet guidelines in 1 above.

Additional comments are:

A. Site studies of representative areas should be funded at this stage.

B. Site studies should be coordinated, summarized, and published within one to one-and-a-half years by BLM/EMRIA Staff - supplemented later, if necessary, with additional data.

C. USGS, BR, SCS, universities, state agencies, and private contractors should continue to be utilized as paid cooperators in study efforts.

D. Additional site studies may be required between ES and actual sale identified in 1 above.

E. Data collected and analyzed at this step should be suitable for mapping at a scale of 1:24,000 or larger.

Final Subgroup Report
Dave Kathman, Leader

Introduction

EMRIA data can be applied to the preferred leasing program at various stages of the planning system and activity plan. Generally most of the inventory data that is or can be applied as basic inventory is a spin off benefit of a (soil, vegetation, water) site study.

The primary purpose of the studies are usually site specific for a small area in relation to the Planning Unit.

The main discussion in this report will be how the existing EMRIA program fits into the preferred leasing program.

Data Needs

In general the land manager needs site specific information for establishing stipulations on leases and to evaluate whether the area is suitable for a surface mining.

EMRIA Data for Preferred Leasing Program

1. Planning System

   a. Basic Resource Information that is collected with present ongoing EMRIA studies can, in some cases, update the Bureau planning documents. Example - soil survey's hydrology studies, overburden studies, etc. The primary intent of most studies is not for large scale basic inventory but site specific information.

b. Unsuitability Criteria that is applied after Step II of the MFP can use EMRIA data if available, in determining wetlands, alluvial valley floors, flood plains and reclaimability.

Reclaimability. If the criteria cannot be determined from existing soils, climate, and plant information, studies may have to be initiated. A first review of a site could determine if further study is needed.

Items to be considered in determining reclaimability are:

(1) Ability to return land to original contour.

(2) Characteristics of original terrain.

(3) Capability of forming a compatible drainage system.

(4) Soil-plant relationship.

  (a) Soil data

  (b) Climatic (rainfall evaporation, etc.)

  (c) Overburden (Geo Chemistry)

  (d) Plant requirements and adapted species.

(5) Geomorphic processes that may hinder reclamation.

(6) Hydrologic balance.

Studies to determine what additional data is needed to determine unsuitability can be carried out during the activity plan, (alluvial valley floors and flood plains, etc.).

2. Coal Activity Planning

The bulk of existing EMRIA studies would fit into the preferred leasing program during the tract site analysis. The data collected will assist in the regional tract ranking and the regional environmental statements.

Sales

After a decision by the Secretary to base a specific tract, an EAR technical exam would be completed for each lease to develop stipulation EMRIA studies (overburden water, vegetation and soil can assist in providing information into this document).

Existing Leases

Mining plans that are submitted for review, EMRIA data will be used in this evaluation. If unsuitability criteria is being applied to an existing lease, EMRIA data will be useful.

Future Role of EMRIA

Assumption - The EMRIA program will continue to be administratively under the Division of Watershed. Thus, serve as the contractor to the Office of Coal Management for collection of certain (specific) watershed data.

An alternative to this assumption is to transfer the EMRIA program operation and personnel to the Office of Coal Management. This would provide for closer coordination and make EMRIA programs more responsive to coal management. It would provide for closer control of coal fund

expenditures and insure all studies were being made on high development potential coal lands.

Over the long-range, the EMRIA program should be designed to complete all projects using at least 75% Bureau personnel. During the short-range operating period, BLM will have to continue to use contracts with other agencies to collect necessary data.

1. Reclaimability - Develop a field procedure system using existing data on soils, climate, and vegetation for identification of coal lands which have a high, medium, and low potential for successful reclamation.
   - Continue collecting data from an on-going EMRIA drilling program.
   - Develop procedure for extrapolating data from EMRIA study sites to areas (soils, climate and vegetation) of similar resource characteristics.
   - Collect, analyze and store data from drill logs of other agencies.
   - Develop training system for use of Alluvial Valley Floors determination criteria.
   - Develop program for use of prime farmland determination criteria.
2. Hydrology Program

   Assuming no geographical expansion of the program and assuming the major (90%) emphasis is on coal activity planning, the following areas will be stressed in the Water Resources program. Funding levels shown are increases above existing funding levels.

a. Modeling Sub-Program

Existing efforts will be continued at same funding level except for the following exceptions:

(1) Provide funding for data inputs that will allow for model application in ungaged areas. (This is primarily climate data) ($400,000/yr. est.)

(2) Provide funding for calibrating basins in Utah and Wyoming. Presently, these states have not been funded in the modeling effort. ($175,000/yr est.)

(3) Provide funding to develop regionalization parameters for the hydrologic model so that model outputs can be combined for sevaral tracts in an area and predictions made for hydrologic behavior of large basins encompassing coal development. ($50,000/yr est.)

(4) Provide funding to increase model capability to handle water quality variables. ($50,000/yr est.)

b. Climatology Data Analysis

This has been a weak point in the reclamation site studies. Need climate (precipitation and temperature) data to answer questions related to revegetation. ($80,000/yr. est.)

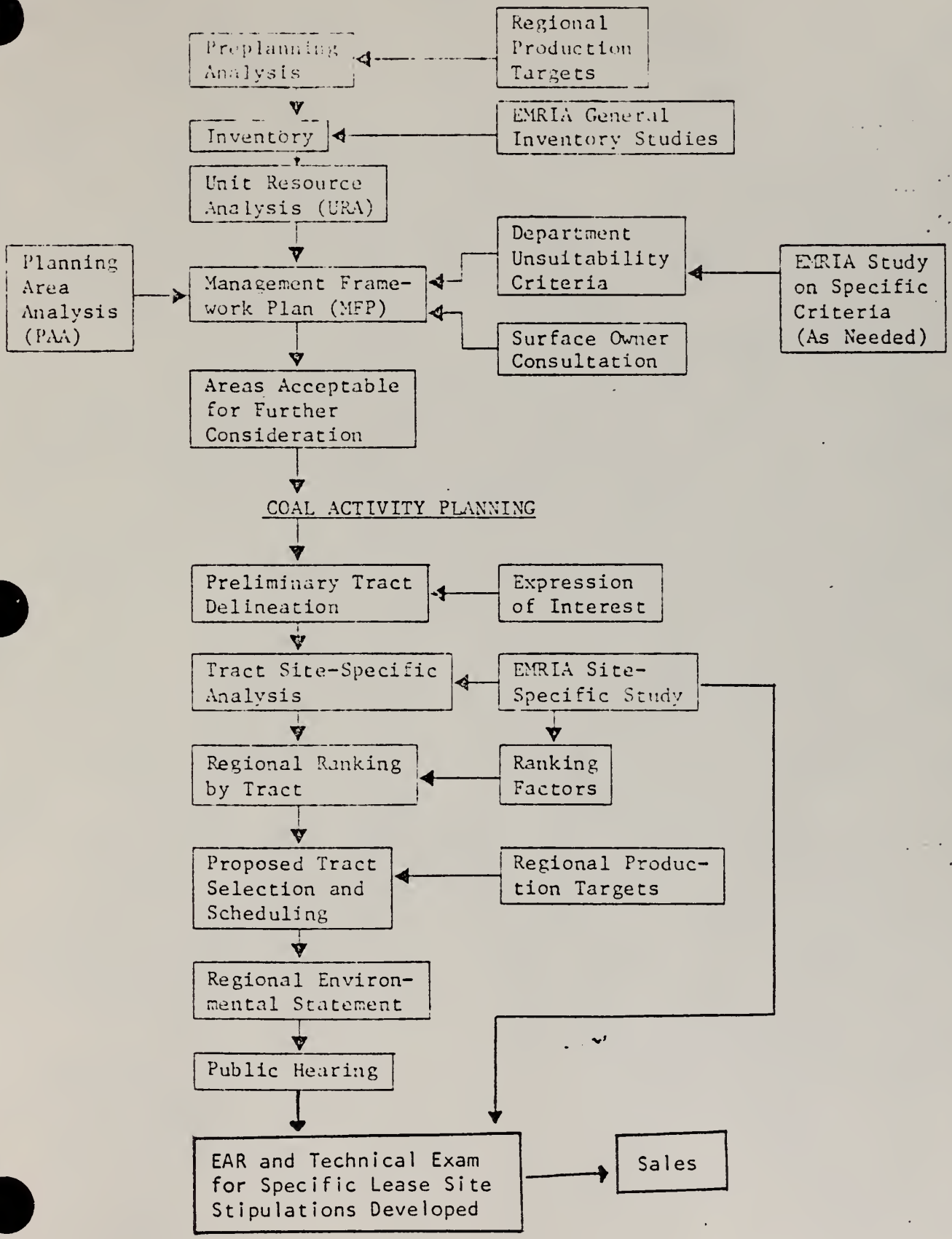
c. Hydrologic Characterization, Inventory and Monitoring

Little or no change to the funding level.

d. Special Hydrologic Studies Related to Reclaimability and Hydrologic Equilibrium Maintenance

These are difficult to foresee. As an example, we are planning to fund in FY 80 a study of snow management on mine spoils to improve plant-water relations in revegetation. Other studies may be funded if they are relevant to EMRIA's mission and needs. ($100,000/yr est.)

EMRIA INPUT INTO PREFERRED LEASING PROGRAM



FINAL SUB-GROUP REPORT

Richard Hopkins, Leader

INTRODUCTION

EMRIA, as it existed in the past, did not provide information that could be used easily in the BLM planning system. We recognize that the information collected through the program must provide inventory data to the Unit Resource Analysis and Coal Activity Plans. A recent development is the Secretary's unsuitability criteria. It will require data collection, and EMRIA can provide information that is lacking concerning unsuitability items.

This means that EMRIA will now provide information for the planning system in support of the coal program. EMRIA can provide information at three levels. The levels are inventory at Pre-planning Analysis and Unit Resource Analysis (URA), Department unsuitability criteria, and specific tracts that come out of the Management Framework Plan (Coal Activity Planning).

INFORMATION NEEDS

The information needed at the three levels is quite different. The needs at Pre-planning and URA are general in nature. The Department's unsuitability criteria is specific for the criteria item being addressed, and the Coal Activity Plan is a site-specific study.

The following explains some of the guides for the information needs and the objective for collecting information at that level. The flow-chart at the end shows where the information should be collected and used in the Bureau

of Land Management planning system.

I. LAND USE PLANNING

A step should be added between Pre-planning Analysis and Unit Resource Analysis. It would be identification of inventory needs by land description (Township and Range) and priority needs. If data is needed to speed up planning for support of the coal program, it could be gathered through EMRIA study contracts. The study would be general in nature and it would be guided by the following:

RESOURCE INVENTORY PRIORITY

1. *1:100,000 scale maps showing mineable coal.*
2. *Surface mineable coal with overburden thickness less than 200 feet.*
3. *Federal Coal Areas.*

GENERAL INVENTORY DATA

The objectives of the inventory are:

1. *To determine what information is available.*
2. *To determine what additional information is needed.*
3. *Select areas acceptable for further consideration for coal leasing.*

The information is needed for the Pre-planning Analysis and the Unit Resource Analysis. The needs may include the following:

Resource	*Level of Information Needed*
Climate	*Precipitation isohyets, mean temperature, mean wind direction and velocity, precipitation extremes (lowest & highest), precipitation probabilities.*
Geology	*Areal data on Known Coal Resource Leasing Area*
Coal	*Sufficient data to identify resource areas in much of the region and sufficient data to identify coal classes. (Require drilling or outcrop information of 1 hole per 6 miles).*
Other Minerals	*Known presence of significant deposits.*
Recreation	*Visual, Wilderness, Areas of Critical Environmental Concern, Areas of National Importance.*
Archeology & Paleontology	*Level I literature search.*
Timber	*Location of merchantable timber.*
Livestock Forage	*Vegetative type and sheep, horses, or cattle use.*
Animals	*Terrestrial and aquatic - main types of social and/or economic value. Presence of T/E.*
Lands	*Urban Expansion, R/W corridors, Recreation and Public Purpose.*
Soils	*Order 3 survey by National Cooperative Soil Survey Standards.*
Vegetation	*Species composition, percent ground cover and Present Condition Classes.*
Hydrology	*Surface water and ground water quantity and quality, areal and temporal variability. Floodplain mapping; hydrologic balance determination. Water supply characteristics (use and availability). Sediment yield characteristics.*

II. *DEPARTMENT UNSUITABILITY CRITERIA*

This has been recently added to the land use planning process specifically for the support of the coal program. In every case, sufficient data about a specific criteria may not be available.

OBJECTIVE

EMRIA could initiate studies and/or inventories to provide information that may be lacking. The information may be used to actually determine whether the criteria situation actually exists.

The unsuitability criteria that may require inventory or further study include:

1. *Federally Listed Endangered Species*
2. *State Listed Endangered Species*
3. *Bald or Golden Eagle Nests*
4. *Bald or Golden Eagle Roosts and Concentration Areas.*
5. *Falcon Cliff Nesting Sites*
6. *Migratory Birds*
7. *State Resident Fish and Wildlife*
8. *Wetlands*
9. *Floodplains*
10. *National Resource Waters*
11. *Prime Farmlands*
12. *Alluvial Valley Floors*
13. *Reclaimability*

III. COAL ACTIVITY PLANNING

Coal Activity Planning begins with Preliminary Tract Delineation, and from this BLM can begin with site-specific analysis. Site selection will be determined by tracts that come out of the planning system by priority. The information should be placed on maps of the scale 1:24,000.

OBJECTIVES

1. Reclaimability to a specific post mining land use.
2. Develop lease stipulations.
3. Develop information that is usable in review and approval of mining/reclamation plans.

The level of information needed at this stage is more detailed and tract specific than that required in Pre-planning and Unit Resource Analysis. The data collected can also be used as a ranking factor that will influence the regional ranking.

Resource	*Level of Information Needed*
Climate	*Tract specific such as precipitation, air and soil temperature, humidity, wind direction and velocity, atmospheric pressure etc. Precipitation and temperature probabilities.*
Geology	*Areal and subsurface data to a known confidence level to the scale 1:24,000.*
Coal	*Sufficient data to define demonstrated resource on most of the site. Sufficient data to define coal ranks within groups (meaningful range analysis). 1 1/2 mile centers on drill holes.*
Other Minerals	*Any showings from coal drilling.*
Recreation	*Visual, Wilderness, Areas of Critical Environmental Cencern.*
Archeology & Paleontology	*Tract survey.*
Timber	*Merchantable timber*
Livestock Forage	*Vegetative type and sheep, horses, or cattle use.*
Animals	*Terrestrial and aquatic - main types of social and/or economic value. List of all species present on tract.*
Lands	*R/W corridors, Urban Expansion.*
Soils	*Order 1 or 2 by the National Cooperative Soil Survey. Should be in enough detail to identify "topsoil". Described and mapped to the phases of series or series variants. Determine soils suitable for topsoiling mine spoils.*
Vegetation	*Delineate vegetation types or range types. Species list for trees, shrubs, forbs, grass or grass like. Percent cover and productivity, soil moisture/vegetation relationships.*
Hydrology	*Site-specifid hydrologic balance. Sfc water quantity, quality, and timing of small watersheds. Sediment characteristics. Snowpack and snow management potential. Floodplain delineation. Ground water quantity and quality. Aquifer characteristics.*

The needs at the three levels would be identified by the District Office. This would be sent to the State Office EMRIA Coordinator where the total state program will be assembled.

IV. OTHER EMRIA EFFORTS

A. Revegetation Trials and Studies

B. Air Quality Studies

C. Equipment Development

EMRIA is providing funding for these activities now. Future funding should answer the question, does this project provide information that will support the Secretary's Coal Program. If a study provides information that has been requested by a State and provides information that is not available from other sources, BLM should consider funding it.

V. TRAINING

Training should be provided to local land managers and their specialists, concerning use and applicability of the information collected during a study. It should cover what conclusions can be made from the study. EMRIA funds could be used for this purpose.

VI. FUTURE ROLE

EMRIA should be redirected as described in I through V above. Funding levels for each state will not be set. They should be directed by the

identified need, and the requests that come from the State Coordinators.

Further explanation about items I, II, and III may be necessary for better understanding. Priority for funding and work on these items should be as follows:

#1 Priority - Item III - Coal Activity Planning

#2 Priority - Item II - Department Unsuitability Criteria

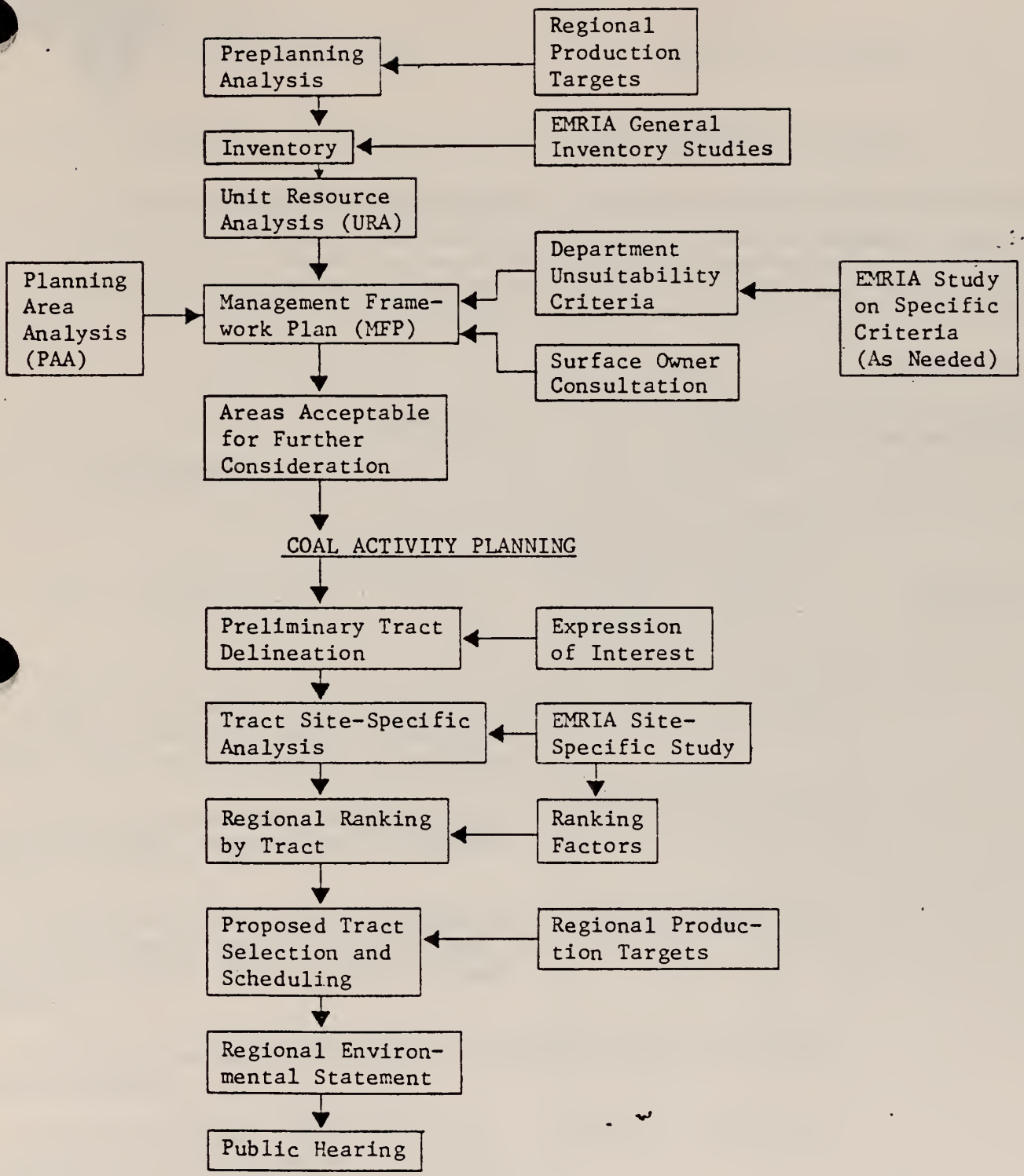
#3 Priority - Item I - Land-Use Planning Information

At each of these three levels of information, EMRIA's role would be to gather data to support the coal program. If something was needed to complete a data gap for coal planning, and no other activities could provide funding, EMRIA should be considered as the source of funds, and the staff to complete the task.

Most of the funding and work should be concentrated on the first two priorities. The Office of Coal Management should be the coordinator for funding. They could distribute funds to EMRIA, Watershed, Wildlife, Vegetation, Recreation, etc., and other agencies such as Geological Survey as a need arises.

They could oversee the distribution of funds and assure that there is no duplication of effort among agencies. If time periods for data collection are a critical concern, this should be stated. It will influence the degree of effort planned by a state.

LAND USE PLANNING



WORK PLAN

BUREAU OF
LAND MANAGEMENT

OBJECTIVE NUMBER 7

EMPLOYEE Herb Runkle

DATE PREPARED 12/1/78

OBJECTIVE To have fowarded to Washington by January 29 a task force report on the EMRIA Program as it relates to the preferred alternative coal management program and other alternatives per 140 Memo of December 6, 1978. (See attached "Report Prospectives")

OBJECTIVE COMPLETION DATE Jan. 29

PROGRESS REVIEWS PLANNED as requested reports by phone every 2 weeks.

COST 5 work months

DATE APPROVED

TASKS REQUIRED TO ACCOMPLISH OBJECTIVES	INDIVIDUAL TASKS COMPLETION DATES				PROGRESS REVIEW
	PLANNED		ACTUAL		
	S	E	S	E	
1. Contact team members and advise of proposed study - proposed report format (address issues using June 78' report as reference).	12/4	12/4	12/8	12/12	
2. Write to team members requesting their impact on ideas, report format, possible schedule for work, etc.	12/4	12/4	12/4	12/7	
3. Develop preliminary list of issues to address and foward Work Plan and issues to Washington 140 by 12/12 - copies to team members.	12/8	12/12	12/6	12/13	
4. Firm-up issues with Washington and team member feed back.	12/6	12/27	12/4	1/19	
5. Collect background information for consideration by team members for January workshops.	12/6	1/3	12/6	1/3	
6. Assign briefing and discussion leaders for issues or sub-issues. Note: discussion leaders may include EMRIA staff or others in addition to team members.	12/22	12/28	12/22	1/3	

TASK REQUIRED TO ACCOMPLISH OBJECTIVES	COMPLETION DATES PLANNED S	PLANNED E	ACTUAL S	ACTUAL E	PROGRESS REVIEW
7. Initial meeting of team at DSC - discussion of issues and assignments for preparation of draft analysis.	1/3 1 pm	1/5 noon	1/3	1/5	
8. Team members prepare draft analysis based on discussions.	1/3	1/12	1/3	1/22	
9. Exchange of drafts by team members for review prior to second team meeting, drafts must be in team members hands by 1/17.	1/12	1/17	1/12	1/19	
10. Second team meeting at DSC, final discussion of issues, presentation of drafts for group review.	1/22 1 pm	1/23 4 pm	1/22	1/23	
11. Consolidate and reconsile as necessary draft reports and analysis by team leader. Final review by Team members	1/22	1/29	1/26	1/29	
12. Final typing and mailing to Washington and others as appropriate.	1/26	1/29	1/26	1/30	

One copy sent to Washington Office (OCM-140) on 1/30/79; additional copies (9) mailed to OCM on 1/30/79, along with a copy to Ron Kuhlman (350). Copies also sent to Task Force Members, State EMRIA Coordinators, and Glen Fulcher (D-300).

REPORT PROSPECTUS

EMRIA Analysis Report, Due January 31, 1979

Objective #7

The report will:

1. Use June 1978 Task Group 406 report as a basis. A "rehash" will not be included. Study coal draft programmatic EIS to determine where EMRIA support might be needed.
2. Proceed on the assumption that the listner has read the 406 report.
3. Address specific agreed upon issues. Especially address timeliness of studies and scope (depth) of studies.
4. Make maximum use of flow charts and other visual communication tools.
5. Hold verbiage to a minimum - use telegraphic style to highlight important issues.
6. Not necessarily reflect consensus of team members. No consensus has to be made - Team Leader may develop final conclusions. (Minority statements may be filed with report.)
7. Address the following issues:
   A. Bureau Planning System and the timing and content of EMRIA funded input for 1980. This includes an analysis of:
      1. Secretary's Unsuitability Criteria and the timing and content of EMRIA funded input.
      2. EMRIA input to Regional coal EISs.

B. EMRIA "Study" areas - interagency coordination, timing and content of products, selection of areas and land manager input.

C. Other specific issues identified by 140 before 12/22/78.

8. Reach conclusions and present recommendations to make efficient use of EMRIA in preferred alternative. Recommendations may alter EMRIA priorities, products, people and dollar allocations. Recommendations should be consistent with new planning regulations.

9. Develop procedures for working integration of EMRIA to coal program.

10. Prepare draft implementation material.

WASHINGTON OFFICE TASK FORCE ASSIGNMENT - DECEMBER 1978

Energy Minerals Rehabilitation Inventory and Analysis (EMRIA)

Description of Work

Analyze the Bureau's EMRIA program as it now pertains to the preferred internal BLM alternative. The purpose, quantity and quality of data needed to support the preferred coal management program and other alternatives and relationships with other programs both inside and outside BLM should be included as part of the analysis. This study should be coordinated with Level of Coal Data Study being conducted by PBA.

Procedure

Set-up Task Force to perform work.

Timeframe

Complete by January 1979

Team

Lead: BLM (140, DSC 307 - Rehabilitation Data Staff)

Members: BLM, GS, OSM

BLM: (350 - Watershed)

Location

Denver, Colorado

LIST OF ATTENDEES

Meeting of January 3-5, 1979

Herb Runkle, BLM, EMRIA Leader	234-2333
Jim Wardlaw, BLM, EMRIA Soil Scientist	234-2333
Benton Tibbetts, BLM, EMRIA Geologist	234-2333
Bruce Van Haveren, BLM, EMRIA Hydrologist	234-2333
Lee Dutcher, USGS, WRD	234-3661
Harold E. Malde, USGS, GD	234-2864
Ed Landis, USGS, GD	234-3579
John McGonigle, USGS, GD	234-3570
John Lovell, BLM, OCM, Washington	343-6821
Dave Kathman, BLM, Colorado State Office	327-3264
Richard Hopkins, BLM, Wyoming State Office	328-2413

Meeting of January 22-23, 1979

Herb Runkle, BLM, EMRIA Leader	234-2333
Benton Tibbetts, BLM, EMRIA Geologist	234-2333
Bruce Van Haveren, BLM, EMRIA Hydrologist	234-2333
Dave Kathman, BLM, Colorado State Office	327-3264
Lee Dutcher, USGS, WRD	234-3661
John Lovell, BLM, OCM, Washington	343-6821
Ray Brubaker, BLM, OCM, Washington	343-4537
Austin Burke, Office of Policy Analysis, Office of the Secretary, Washington	343-7785
Gary Schneider, USGS, BCR	234-3578